W5YI

National Volunteer Examiner Coordinator

REPORT

Up to the minute news from the world of amateur radio, personal computing and emerging electronics. While no guarantee is made, information is from sources we believe to be reliable. May be reproduced providing credit is given to The W5YI Report.

Fred Maia, W5YI, Editor, P.O. Box 565101, Dallas, TX 75356-5101

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FCC NPRM ON HANDICAPPED TELEGRAPHY WAIVERS

We received the actual *Notice of Proposed Rulemaking* covering how the FCC proposes to grant 13 and 20 word-per-minute telegraphy credit to handicapped amateurs holding at least a Novice operator license. See new Part §97.505(5). The following is the major portion of the NPRM.

Federal Communications Commission
PR Docket No. 90-356
Amendment of the Amateur Radio Service Rules to Make the Amateur Service More Accessible to Persons with Handicaps.

NOTICE OF PROPOSED RULEMAKING
Adopted: Aug. 1, 1990; Released: Aug, 9, 1990

DISCUSSION:

To make all classes of amateur operator licenses accessible to persons who, because of their handicaps cannot pass the required telegraphy examinations, the volunteer-examiner coordinators (VECs), in response to our request, have expanded the special procedures the VE's make to accommodate handicapped individuals.

The special procedures now include, as warranted, suitable pauses in sending the message after each sentence, each phrase, each word, or even each character to allow the examinee additional time to absorb and interpret what was sent. Where warranted, a sending test is substituted for a receiving test. Section §97.509(h) already provides for these expanded special procedures.

There remain, however, otherwise qualified licensees who because of their severe handicaps, cannot pass the higher speed examinations even when special accommodation procedures are used. To assist such individuals, we propose to exempt from these examinations individuals holding current, or renewable, Novice, Technician, General, or Advanced Class operator licenses.

[The FCC added that application for renewal of an expired amateur service license may be made during a grace period of two years after the expiration date. (See Section §97.19(c)]. Severely handicapped applicants not holding a current license, however, would be required to pass at least the 5 wpm element 1(A). The VEs must make any necessary accommodations.

The exemption portion of our proposal encompasses only amateur operator licenses because these individuals have passed either the 5 wpm or 13 wpm telegraphy examination. The international *Radio Regulations No. 2735* (Geneva, 1979) require that all persons seeking a license to operate an amateur station transmitting below 30 MHz prove that they are able to send correctly by hand and receive correctly by ear texts in Morse code signals. Section §97.509 of the Commission's Rules provides that passing a telegraphy receiving examination is adequate proof of an examinee's ability to both send and receive telegraphy.

Administratively, the exemption provision would be incorporated into the existing VEC system. All applicants for a new General, Advanced, or Amateur Extra Class of operator license must present completed FCC

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Form 610 application documents to the VEs prior to examination. They also must show to the VEs the documents for which they claim examination element credit. (See Section §97.505)

Under the proposed rules, the VEs would give examination credit to severely handicapped licensees seeking exemption from the element 1(B) thirteen wpm or the element 1(C) twenty wpm telegraphy examinations. The examinees would also be required to show an authentic certification from a physician attesting that they cannot pass these examinations because of severe handicaps. If the examinee successfully completes the written examination, the application document together with the physician's certification would be submitted to the VEC for screening and forwarding to our Gettysburg office. For the Morse code examination element credit, the application documents would be reviewed by the Commission and a license would be issued if we find them to be in order.

For the purposes of these proposed rules, we define a physician as a person who is currently licensed to practice in a place where the amateur service is regulated by the Commission as either a Doctor of Medicine (M.D.) or as a Doctor of Osteopathy (D.O.). We want to emphasize that VEs and VECs would not make medical judgments about the severity, effect, or duration of a handicap. Their role in this process would be confined to assuring that the certifications appear not to be fraudulent and meet the requirements of the Rules. As assist them in this task, we propose that the certification, in addition to having the physician's signature, contain the physician's name, address, and office telephone number.

In accordance with the *Rehabilitation Act of 1973,* as amended, we propose to define the term "severely handicapped individual" to mean a person who has a severe physical or mental disability which seriously limits one or more functional capacities (such as mobility, communication, self-care, self direction, interpersonal skills, work tolerance, or work skills) in terms of employability; whose vocational rehabilitation can be expected to require multiple vocational rehabilitation services over an extended period of time; and who has one or more physical or mental disabilities resulting from amputation, arthritis, autism, blindness, burn injury, cancer, cerebral palsy, cystic fibrosis, deafness, head injury, heart disease, hemiplegia, hemophilia, respiratory or pulmonary dysfunction, mental retardation, mental illness, multiple sclerosis, muscular dystrophy, musculo-skeletal disorders, neurological disorders (including stroke and epilepsy), paraplegia, quadriplegia, and other spinal cord conditions, sickle cell anemia, specific learning disability, end-stage renal disease, or other disability or combination of disabilities determined on the basis of an evaluation of rehabilitation potential to cause comparable substantial functional limitation. We invite comments on this aspect of the proposal.

CONCLUSION:

Because of handicaps that prevented them from mastering Morse code telegraphy, many otherwise qualified persons may have been barred from enjoying the privileges associated with the higher classes of amateur operator licenses. We believe that it is in the public interest to make the amateur service more accessible to individuals with handicaps.

Expanding the special accommodations that VEs make when administering any telegraphy examination to handicapped persons combined with our exemptions for severely handicapped licensees from the higher speed telegraphy examinations will further that objective. Accordingly, we invite comments on the proposed amendments to Part 97, as set forth in the attached Appendix.

Further, as noted above, to make all classes of amateur operator licenses, accessible to handicapped persons, the VEs administer the examinations using special accommodation procedures, as warranted.

We also request comments addressing whether these procedures provide sufficient accommodation for severely handicapped persons seeking to pass the minimum speed 5 wpm examination. If not, what improvements in the special procedures or changes in our rules are recommended to accommodate adequately these persons, while still satisfying the Morse code requirements of the international Radio Regulations?

PROCEDURAL MATTERS:

Interested parties may file comments ***on or before September 24, 1990,*** and reply comments ***on or before October 9, 1990.*** Extensions of time are not contemplated. To file formally in this proceeding, participants must file an original and four copies of all comments and reply comments. If participants want each Commissioner to receive a personal copy of their comments, an original and nine copies must be filed. Comments and reply comments must state PR Docket No. 90-356. They should be sent to the: **Secretary, Federal Communications Commission, Washington, D.C. 20554.**

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APPENDIX:
Section §97.3 is amended by adding new paragraph (a) (29) and redesignating present paragraph (a)(29) through (a)(40) as (a)(30) through(a)(41):

§97.3 Definitions.

(a) The definitions of terms used in Part 97 are:

* * * * *

(29) *Physician.* For the purpose of this Part, a person who is licensed to practice in a place where the amateur service is regulated by the FCC, as either a Doctor of Medicine (M.D.) or a Doctor of Osteopathy (D.O.).

Section §97.505 is amended by adding paragraph (a) (5), as follows:

§97.505 Element credit.

(a) The administering VEs must give credit as specified below to an examinee holding any of the following documents:

* * * * *

(5) A current, or expired but within the grace period for renewal, Novice, Technician, General, or Advanced Class operator license and a physician's written statement over his or her signature certifying that because the person is an individual with a severe handicap, as defined at §29 U.S.C. Section 706(15)(A), the person is unable to pass a 13, Element 1(B) or 20 words-per-minute Element 1(C) telegraphy examination. In addition, the certification must contain the physician's name, address, and office telephone number, either typed or printed.

* * * * *

Section §97.511 is amended by adding a sentence to paragraph (f) as follows:

§97.511 Technician, General, Advanced and Amateur Extra Class operator license examination.

* * * * *

(f) Within 10 days of the administration of a successful examination for the Technician, General, Advanced or Amateur Extra Class operator license, the administering VEs must submit the application to the coordinating VEC. If telegraphy element credit is claimed under Section §97.505 (a)(5), the physician's written statement must be attached to the application.

MORE COMMENTS ON COMMUNICATOR CLASS

Two newer technology modes are satellite and computer-to-computer "packet" radio. The *Radio Amateur Satellite Corporation* is the major association of hams who communicate via satellites. Packet users are generally regarded to be represented by TAPR, the *Tucson Amateur Packet Radio* group.

We finally were able to get a copy of AMSAT's comments on "no-code". They were received by the FCC on August 8, two days past the August 6th cutoff. They will undoubtedly be accepted.

Lyle V. Johnson, WA7GXD, Tucson Amateur Packet Radio president, told us their official comments were made by TAPR board member ***Phil Karn, KA9Q,*** "...and submitted under his own name because the TAPR board lacked sufficient time to review and 'bless' them."

Radio Amateur Satellite Corporation

AMSAT is a non-profit educational organization founded in 1969. Since its founding, AMSAT groups have been formed in many countries throughout the world. In order to distinguish between them, area designations have been added to the basic AMSAT name. The founding organization now has an "NA" attached to denote AMSAT North America. AMSAT-NA membership currently numbers about six thousand. Since its inception, AMSAT-NA has been, and continues to be, active in the design and construction of satellites for the Amateur Service.

The AMSAT comments gave a status report on current OSCARs, *Orbiting Satellites Carrying Amateur Radio,* including the January 1990 launch of six "MicroSats" at once on a single Ariane rocket from French Guiana. "AMSAT-NA is also actively planning its most ambitious project - a geosynchronous satellite."

AMSAT-NA said "...its board discussed the concept of, and voted unanimously to support, a code-free license some months before the ARRL established its committee to study the matter. The League committee, which was aware of AMSAT-NA's position as well as a similar resolution by the Board of Directors of the Tucson Area Packet Radio (TAPR) organization, ultimately recommended to the ARRL Board that a Petition for Rulemaking be submitted."

AMSAT's reason for supporting a code-free amateur class was based on meeting two principal objectives:

(1.) "Increase the amateur population on the higher bands, especially above 1 GHz. This is particularly important in view of the approaching WARC in which it is believed that great pressure, particularly from European countries will be exerted to reallocate parts, or all, of these bands to other services. Since continued amateur allocations in this part of the spectrum are considered vital to the future of the Amateur Space Program, the AMSAT board members favor anything that can be done to promote amateur occupancy of and, hence continued amateur access to these bands.

(2.) Bring more talented technically minded people into amateur radio. The AMSAT board members feel that there are many people, especially young people, who are intrigued by today's technology such as computers and space, but are deterred from becoming licensed amateurs by the need to learn the Morse code. A majority of the Board believes that the problem is not with these people's inability to learn the code, but rather their conviction that it is irrelevant to today's communications techniques.

"AMSAT-NA disagrees with the Commission's proposal to limit the privileges of the new proposed license to the 220 MHz band and above. The basis for this view is that such a limitation will prevent no-code licensees from using some of the amateur satellites now in orbit. We believe that provisions should be made to allow them that facility. This could be done by either giving them access to the segments of that band used for satellite uplinks or through some kind of waiver which would be in effect as long as amateur satellites with uplinks in the 2 meter band are operating.

"Most people in and out of Amateur Radio seem to believe that VHF is used almost exclusively for wide band modes, FM voice, packet radio and amateur TV. They fail to consider the important minority who employ narrow band transmission modes such as SSB and CW for both terrestrial and satellite work. ....The increasing use of FM for both voice and packet radio will soon make weak signal work all but impossible for many operators. A similar fate could befall satellite operators with further encroachment by FM users. With the exception of the segments 50.0 to 50.1 and 144.0 to 144.1, which are reserved for A1A (CW); current FCC rules permit wide band modes, based on FM to be used anywhere above 50 MHz. These CW preserves do nothing to prevent people from operating FM anywhere else in the VHF spectrum - including the segments being used for satellites.

"In the early 1980's AMSAT announced the intention to use the 144.3 to 144.5 MHz segment for future amateur satellites. ...Despite this, in recent years numerous local voice nets and many packet services have cropped up between 144.3 and 144.5. Some have even been coordinated by local and regional frequency coordinators. AMSAT-NA believes that if code-free licensees are given unlimited access to 2 meters, new rules must be instituted to prohibit FM operation in the weak signal and satellite segments (144.1 to 144.5 and 145.8 to 146.0 MHz.)

"...our own membership is divided on the broader question of 2 meters for code-free licensees, (although) there is virtually unanimous support for their use of amateur satellites. Should the Commission decide to prohibit 2 meter use by the new licensees, we urge that an exception be made for earth operation in the Amateur Satellite Service. Holders of European code-free licenses, with requirements similar to those we are proposing, have used our satellites successfully for many years with no friction with other satellite users of which we are aware.

"AMSAT-NA disagrees with the Commission's proposal to eliminate the Novice Class license. (The code-free license) ...should be aimed at bringing in the more technically inclined people who see no place for Morse code in modern communications. In our view, the Novice class has just the opposite objective. ...Having both code-free and Novice class licensees will provide a dual entry route to Amateur Radio. This could be very beneficial in recruiting the greatest number of new Amateurs. AMSAT sees no reason why the Novice examination cannot be integrated into the VE system, either with or without reimbursements. The reimbursement involved is not significant in terms of the spending habits of most of today's young people.

"AMSAT also does not agree with the Commission's proposal to eliminate the Technician class license. It constitutes a general VHF license. ...AMSAT-NA recommends that the Technician class license be retained and that code-free licensees who pass the 5 word per minute test be upgraded to Technician. ...The Commission's proposal to forever saddle code-free licensees who pass a code test with a callsign suffix is unwieldy, unfair and unnecessary.

"AMSAT-NA believes that the name applied to the code-free license is quite important. The Commission has followed the ARRL proposal and called the code-free license 'Communicator.' We do not consider this name very appropriate. While no name is perfect, AMSAT-NA would prefer a name such as 'Experimenter' as better typifying the purpose which we believe

WOULD YOU LIKE TO BECOME A VOLUNTEER EXAMINER? under "The W5YI Report" Program? If so, please send a copy of your Extra Class license, the following signed statement, and a SASE

"I am a currently licensed Extra Class amateur radio operator and wish to be a volunteer examiner. I have never had my station or operator license revoked or suspended. I do not own a significant

the code-free license should serve.

AMSAT-NA urges the following actions:

(1.) Institute a code-free class of Amateur Radio license called the 'Experimenter Class' with a written test which is at least as difficult as the current Technician/General exam; and possibly of greater difficulty, with digital questions included.

(2.) Provide privileges for Experimenter licensees such that they may use existing amateur satellites having 2 meter uplinks. This can be done by opening all of the 2 meter band to them, opening only the segments used for satellite uplinks (limiting their use to satellites only) or some kind of waiver which would permit them to use the satellites.

(3.) Retain the Novice and Technician Class license and put the Novice examination under the VE program.

(4.) Upgrade Experimenter Class licensees to Technician upon passage of a 5 wpm code test and General upon passage of a 13 wpm code test. This approach negates the need for special suffixes forever carried by code-free licensees who have passed a code examination.

(5.) If the Commission sees fit to grant code-free licensees access to 2 meters, institute new rules excluding FM operation from 144.1 to 144.5 and 145.8 to 146.00 MHz with a provision for FM for spacecraft.

[Submitted by ***Douglas Loughmiller, KO5I,*** AMSAT President, *Radio Amateur Satellite Corporation,* P.O. Box #27, Washington, DC 20044.]

Tucson Amateur Packet Radio

"Amateur Radio's most important role is to interest young people in science and technology and to encourage them to pursue careers in the field. It once did this admirably; amateur radio has not kept up with the times and it is faltering. The average U.S. amateur is now over 50 years old, growth is stagnant, and the code requirement is to blame."

"A codeless amateur radio license is long overdue and must be created without delay. Furthermore, it must grant full amateur privileges above 30 MHz. It should not be seen merely as an 'entry class' amateur license with holders still expected to learn the code before they can become 'real' amateurs."

"Code proficiency is no more relevant to operation on the 50 and 144 MHz bands than it is on the frequencies above 220 MHz. Furthermore, access to the 144 MHz band in particular is absolutely essential if the Communicator license is to attract newcomers and integrate them into the mainstream of amateur radio."

"The Novice license should be retained. I agree with the Commission that there are too many license classes, but this issue should be addressed in a separate proceeding by proposing that the top (rather than the bottom) of the Incentive Licensing 'ladder' be dismantled."

Those of the words of **Phil Karn, KA9Q,** 33, of Warren, N.J. He became interested in ham radio as a youngster and was an Extra Class amateur by age 16. "My decision to pursue a technical career in communications had much to do with my exposure to amateur radio in high school." Professionally Phil does research in computer networking for Bellcore, the R&D consortium owned by the seven Bell telephone companies. He holds a BS in Electrical Engineering from Cornell University, and an MS (Computer Engineering) from Carnegie-Mellon University.

Phil retains a strong interest in advanced amateur radio technology. He helped design the AX.25 amateur packet protocol and does orbital analysis for AMSAT. He sits on both the TAPR and AMSAT Boards. AMSAT granted Phil its Technical Achievement Award in 1986 and he holds the 1989 Dayton HamVention Special Achievement Award.

Karn is the primary author of the *KA9Q Network Operating System (NOS),* a computer software pack-age that implements the AX.25 and NET/ROM amateur radio networking protocols ...and the *U.S. Department of Defense (DoD) Standard Internet Protocol Suite ("TCP/IP").*

These programs (including the 50,000 line source code) are available without cost to any amateur radio or educational user. This software has also proved very popular with users of the *National Science Foundation Research Internet (NSFNET).* "Some users have made significant contributions to the software even though they are not licensed amateurs. I consider them to be prime candidates for the Communicator license." Some of the points that Phil makes in his comments are:

On America's youth

"The debate over the codeless license is really a debate over the fundamental purpose of the Amateur Service. ...the existing §97.1, Basis and Purpose is exceptionally well written and has withstood the test of time. Its authors knew that rapid technological

progress characterizes this field, so they wisely avoided mentioning any particular radio communications technology such as Morse code. Instead, they used phrases such as 'advancing skills' and 'advancement of the radio art' to state clearly that amateur radio was expected to keep up with the times."

"In the earliest days, Morse code was essential to the Amateur Service... Today it protects only the parochial interests of those already licensed, not the broader interests of the public that entrusts valuable spectrum to the Amateur Service. ...Some stubbornly refuse to accept that we do not own our spectrum and that we must continually earn our allocations."

"Most of today's technical innovations come from corporate and government research labs, not from radio amateurs. We hams simply do not have the resources to compete. Nor can amateur radio's much-touted emergency service role alone justify its allocations much longer, given rapid deployment of cellular radio systems that have placed millions of telephones in the hands of motorists almost everywhere. In short, few if any of its specific technical or operating activities will be able to sustain amateur radio forever."

"There is one role, however, that can easily justify the existence of amateur radio well into the future. I speak of its remarkable ability to interest young people in science and technology and to give them a ready outlet to express and develop that interest. Many technical professionals, including myself, were originally introduced as youngsters to electronics and communications technology through amateur radio. It played a large part in encouraging many of us to pursue careers in the field. And our professions benefit everyone, not just those who are licensed amateurs."

"This unique role makes amateur radio a valuable national resource. It justifies the allocation of precious spectrum that some argue be reallocated to serve the public's need more directly. But young people are an even more precious resource than RF spectrum. At an age when many of my peers were still trying to figure out what to do with their lives, I knew what I wanted to do with mine -- thanks to amateur radio."

"Today, amateur radio no longer attracts nearly as many young people. One oft-quoted reason is the personal computer, a communications tool par excellence that, unlike amateur radio, requires no operator license and no code test. ...I discovered computers a year after my introduction to amateur radio. If computers had come first, I might never have bothered to learn the code and become an amateur."

"Another reason amateur radio no longer attracts young people is the widespread (and I think mostly accurate) image of radio amateurs as reactionary old men whose staunch defense of an irrelevant code requirement epitomizes everything that is wrong with amateur radio. Amateur radio should be an investment in the future. It is now a monument to the past. Creative and talented young people are always much more interested in future possibilities than in old monuments. The codeless license is therefore absolutely essential if amateur radio is to justify its existence."

On attracting technical contributors

"I often try to interest highly technically oriented people that I believe would be an asset to amateur radio. ...the initial fascination quickly dissipates when I get to the 'fine print' -- that knowledge of Morse code is still required for every class of U.S. amateur license. To non-amateurs in my profession, amateur radio is a relic of a bygone era. ...Creativity, originality and insight are uniquely human traits vital to technical innovation and people with these traits often have a strong built-in drive to express them. Give them an outlet, and they'll prove they're far from lazy. ...require these people to learn the Morse code and you'll often run into a brick wall."

"The problem is that for those who will never use it, learning the Morse code is a pointless exercise in rote memorization. There's no room for creativity and this deeply offends many of the same people amateur radio needs the most. ...The mainstream amateur publications in several other countries, such as *CQ DL* in West Germany and *CQ Ham Radio* in Japan are much more technically ori-ented than their U.S. counterpart, *QST*. ...both West Germany and Japan have popular no-code licenses."

"Being surrounded by professional colleagues, some of whom would be significant contributors to amateur radio were it not for the code requirement makes it all the more painful. It's like being stranded in a life raft: water, water everywhere, but not a drop to drink."

Full privileges above 30 MHz.

"The Communicator proposal is a step in the right direction, but it does not go far enough. Since the only difference between the Communicator and the Technician licenses would be a code test, there is

simply no rational justification for excluding Communicators from the 50 and 144 MHz bands or for limiting transmitter powers to 200 watts."

"Besides its basic unfairness, limiting Communicators to frequencies above 220 MHz would have many serious drawbacks. The most important is the lessening of the appeal of the Communicator license to prospective amateurs, particularly in the less densely populated areas of the country where the higher frequency bands are lightly used. A related problem is the reduced opportunity for contact between Communicators and existing amateurs. Given the widely understood importance of quickly assimilating the newcomers into the mainstream of the amateur service, creating a 'ghetto' for the Communicators is most unwise."

"If the influx of new amateurs causes congestion on the 144 MHz band in some densely populated areas, so be it. Although I believe this risk to be vastly overstated, the worst that could happen is that all users of the band, not just the Communicators, would be motivated to use the higher frequency bands and to improve on their spectrum management techniques."

Simplify the license structure

"The Commission says that its staff cannot process more than 50,000 amateur license applications per year. This probably explains the Commission's proposal to do away with the Novice and Technician classes when the Communicator is created."

"I am sympathetic to this problem. The U.S. already has more examination elements and license classes than any other country. Recent budgetary pressures have undoubtedly made the overhead of this unwieldy system intolerable. Dismantling the cumbersome and largely ineffective Incentive Licensing System adopted in 1968 would free processing capacity that would be better used to handle Communicator applications."

"However, the Commission proposes to begin dismantling the Incentive Licensing ladder at the wrong end. Even with the new Communicator, the Novice class would continue to serve a valid purpose as an entry level license for those interested primarily in HF operation. If the licensing structure is to be simplified, then start at the upper end."

"...as few as three classes could suffice: Novice (written test and 5 wpm code; current Novice privileges); Communicator (Tech/General written test, no code test - full privileges above 30 MHz); and General: (Tech/General level written test, 5 wpm code test with full amateur privileges on all bands.) All existing licensees except Novice and Communicator would be grandfathered to General. Novices could upgrade to General by taking the written test, while a Communicator could upgrade by taking the code test. A similar structure exists in many other countries and works well."

"Although such a major simplification of the licensing structure is most desirable, it is probably outside the scope of this proceeding. [It does, however,] show one way that the Communicator could be created and the Novice retained without exceeding the Commission's application processing capacity."

"I am well aware that merely creating the Communicator won't solve our problems overnight. For it to succeed, existing amateurs must welcome the new licensees and introduce them to a wide range of exciting and challenging activities."

[Submitted by ***Philip R. Karn, Jr., KA9Q,*** *Tucson Amateur Packet Radio,* P.O. Box 12925, Tucson, Arizona 85732.]

AMATEUR RADIO CALL SIGNS

...issued as of the first of August 1990:

Radio	*Gp."A"*	*Gp."B"*	*Gp."C"*	*Gp."D"*
District	*Extra*	*Advan.*	*Tech/Gen*	*Novice*
Ø (*)	AAØBQ	KFØLY	NØMHU	KBØHKI
1	WJ1F	KC1WI	N1HYJ	KA1WGV
2 (*)	AA2AT	KF2VI	N2LCV	KB2KZH
3	WD3B	KD3TI	N3IKM	KA3WSQ
4 (*)	AB4YA	KN4NK	N4ZZD	KC4SGJ
5 (*)	AA5UA	KI5IB	N5RDS	KB5NME
6 (*)	AA6XF	KK6OB	N6ZZZ	KC6MWQ
7 (*)	AA7FO	KG7HJ	N7PIK	KB7LMF
8 (*)	AA8BX	KF8IO	N8MUC	KB8KOJ
9	WU9G	KE9YP	N9KAC	KB9FJD
N.Mariana Is.	AHØI	AHØAG	KHØAM	WHØAAL
Guam	KH2N	AH2CH	KH2EO	WH2AMQ
Johnston Is.	AH3C	AH3AD	KH3AC	WH3AAG
Midway Is.		AH4AA	KH4AD	WH4AAH
Hawaii	(**)	AH6KN	NH6XH	WH6CIM
Kure Is.			KH7AA	
Amer. Samoa	AH8D	AH8AD	KH8AI	WH8AAZ
Wake W.Peale	AH9A	AH9AD	KH9AE	WH9AAH
Alaska	(**)	AL7MG	NL7UQ	WL7BZG
Virgin Is.	NP2F	KP2BU	NP2DX	WP2AHD
Puerto Rico	(**)	KP4QY	WP4YN	WP4JGT

CALL SIGN WATCH: *=All 2-by-1 call signs have been assigned in the 2nd, 4th, 5th, 6th, 7th, 8th and "0" radio districts where 2-by-1 format call signs from the

making, preparing or distributing amateur radio equipment or license preparation materials. My age is at least 18 years old."

tification (optional) is also available for $1.00. Details and accreditation materials will be sent to you in about two weeks.

AA-AK prefix block are now being assigned to Extra Class amateurs. (Other than DX, only the 1st, 3rd and 9th district have 2-by-1's left!)

**=All Group A (2-by-1) format call signs have been assigned in Hawaii, Alaska and Puerto Rico. Group "B" (2-by-2) format call signs are assigned to Extra Class amateurs when Group "A" are depleted.

Group "C" (1-by-3) call signs have now run out in the 6th call district and will shortly (by the time you read this) in the 4th call district. According to the rules, Technician/General class amateurs are assigned Group "D" (2-by-3 format) call signs when all Group "C" have been assigned. Upgrading Novice amateurs holding a 2-by-3 format call sign in the 4th and 6th call areas will no longer be able to request a 1-by-3 and will be automatically assigned another 2-by-3 format call sign if they do!

[Source: FCC, Gettysburg, Pennsylvania]

RFI / TVI UPDATE

We are sometimes asked about the status of the "Goldwater bill", the legislation passed several years ago that gave the FCC authority to require minimum interference susceptibility standards for consumer electronics products. Even with this hard-won legislation, it still appears that TVs and electronic gadgets are as susceptible to RFI from regular amateur operation as ever.

At a recent Washington conference on electromagnetic compatibility (EMC), we questioned David Hilliard, an attorney with top communications law firm *Wiley, Rein and Fielding,* about whether the FCC would ever get around to following the intent of that legislation.

He replied, "The legislation pertains to interference susceptibility or immunity for home entertainment equipment and was limited to that. I think that the Commission has not shown much eagerness for pursuing it. In this age of budget constraints, the FCC will have many higher priorities on its agenda. I think it would take a lot of pressure that probably isn't there right now, to bring that about. I don't see it as a high priority.

"The one thing I find intriguing is that with the new EMC directive from Europe, dealing with immunity, there may be some pressure brought about from overseas as products have to grapple with immunity questions. American manufacturers may find that there may be some indirect effect from what happens across the Atlantic."

EMC Directive

Hilliard was referring to the regulation known officially as European Economic Community Directive 89/336/-EEC, which becomes fully effective Dec. 31, 1992.

By that date, the EC nations must adopt mandatory standards for immunity from RFI. Products that do not meet these standards will not be allowed to be marketed in those countries (Britain, Belgium, Denmark, France, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain and West Germany). The attorney implied that American manufacturers might have to tighten up RFI susceptibility of their products if they want to market overseas, in order to comply with the Directive.

Few TVs and other home electronics marketed in the U.S. are made by American companies, however. We asked EMC engineers attending the conference if they expect that the need for Japanese and Korean manufacturers to comply with the Directive will result in delivery of more RFI-immune consumer products to the U.S.?

Unfortunately, their consensus was that manufacturers are more likely to create two lines of products: those intended for America, and a separate line of better-shielded units intended for Europe where tough RFI regulations apply. This is so, they said, even though the cost of adequate filters and shielding may add little to the cost of each product.

In other words, even with increased prevention of RFI in Europe, it looks like "business as usual" for RFI and TVI susceptible products here at home. And with the FCC ordered by the White House's Office of Management and Budget (OMB) to plan for a 32% budget cut as a result of Gramm-Rudman deficit-reduction legislation, enforcement of RFI susceptibility standards may remain on the back burner for some time yet.

The drastic budget cuts can be avoided by the administration agreeing on another list of cut-backs, raising taxes, or it could rewrite the deficit-reduction law to change the maximum deficit allowed for fiscal 1991, which begins Oct. 1. Considering the Persian Gulf crisis it appears the third option is the most logical. Most of the agency's current $107.5 million budget goes for paychecks for its 1,700 employees.

SHORT BITS

- Columbia STS-35, with the Astro-1 payload and the

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Shuttle Amateur Radio Experiment (SAREX), are scheduled for launch on September 1 with payload specialist ***Ron Parise/WA4SIR*** on board. The launch countdown will begin at 1 a.m. Wednesday, August 29, at the T-minus 43 hour mark, leading up to the planned liftoff at 1:17 a.m. EDT on Saturday, Sept. 1. Late word in the August 15th issue of *Oscar Satellite Report,* however, says the liftoff may be delayed (again) until September 7th. Three more astronauts ***(Jay Apt/N5QWL, Steve Nagel/N5RAW*** and ***Linda Godwin/N5RAX)*** are scheduled for the November STS-37 shuttle flight.

Bob Myers/W1XT, publisher of *Oscar Satellite Report* has announced a new journal for Amateur Radio satellite enthusiasts. It will be titled ***Satellite Operator*** and will carry 8 to 12 pages of features each month. Domestic subscriptions are $24 for OSR subscribers and $30 for others. *(Order from R. Myers Communications, PO Box 175, Litchfield, CT 06759, (203) 283-0769, MCI 225-5123.)*

● *DX operators are* ***furious over the use of the Packet-Cluster 144.95 MHz frequency*** *as the primary SAREX uplink fre-quency. Letters have gone out from disgruntled DXers to the ARRL, Astronauts* ***Ron Parise/-WA4SIR*** *and* ***Ken Cameron/-KB5AWP*** *and members of the amateur media.* ***Larry Price/-W4RA,*** *League president said "...NASA's EMC (electro-magnetic compatibility) acceptance testing procedures are so severe, it would not be in our interests to re-open the question of frequency selection for this SAREX." ARRL Executive Vice President* ***Dave Sumner/K1ZZ*** *feels "...for the few minutes on the few days that SAREX will be available for operation in our areas, a little potential inconvenience is a small price to pay for the opportunities afforded by SAREX." Theoretically, SAREX will interfere with Packet-Cluster messages that num-ber nearly a million a day! The 144.95 MHz frequency selec-tion was first used by* ***Owen Garriott/W5LFL*** *aboard the STS-9 in 1983.* ***Tony England/WØORE*** *also used the same radio and frequencies some time later. Both shuttle flights predate PacketCluster DX spotting operations. Garriott's NASA approved Motorola handheld was retrieved from storage for the 1990 SAREX flights. Only two of its 48 channels have 600 KHz offsets.*

Tom,/W3IA and Josie/K3SJS Chesworth have launched a new bi-monthly, ad-supported ham radio magazine called ***BEAM.*** The July/August 1990 issue included a particularly interesting article on the effects of RF on digital devices such as microprocessors, and a miniature 40 meter receiver construction article. *(Subscriptions are free to qualified readers. Write to* ***BEAM,*** *PO Box #650, Boalsburg, PA 16827, (814) 466-6559)*

● The FCC's New York field office has ***shut down an unlicensed FM station*** operating at 91.9 MHz from Floral Park, New York. The operator, Joseph Saponaro, Jr., was fined $1,500. FCC personnel heard the station on July 26 and dispatched a mobile DF unit to track the signal. Sapanaro had previously tangled with the Commission in 1981 when the FCC closed down his pirate station "WFPA" operating at 91.9 MHz in the FM broadcast band. Unlicensed operation can carry a fine of up to $100,000 and/or one year in prison.

● The FCC is ***conducting a nationwide sweep of cable TV systems*** to ensure compliance with new signal leakage limits that went into effect July 1. All systems found to exceed a specific leakage threshold will be ordered to shut down operation in the bands 108-137 and 225-400 MHz. These are not amateur frequencies; they are aviation communications and navigation frequencies. Cable systems ordered to stop using those frequencies will also be subject to fines.

● Some amateurs are complaining about what is being billed in catalog advertising as an ***FCC approved wireless Pirate TV Station.*** It is used to extend video transmissions to other TV sets in a home. Marketed by DAK Industries, Inc. (1-800-325-0800), the No. 5704 *InnerView TV Transmitter* radiates over-the-air in the 33-cm ham band between 910-918 MHz. No license is required. The consumer gadget is legal, however, since it operates under low-power §Part 15 rules. It's range is supposedly only 100 feet. Cost is $99.90 ($6 P&H) What DAK's advertising does not say, however, is that consumers must endure interference from ham stations legally operating between 902 and 928 MHz.

● According to an ***FCC Public Notice*** released August 14th, FBI agents and FCC investigators have arrested ***Anthony V. Marcantonio, KA2ZGE,*** of the Douglaston section of Queens, New York and seized 20 pieces of his radio transmitting equipment. The action took place after the amateur made death threats over the radio against an FCC investigator. A federal judge set Marcantonio's bond at $50,000 following a hearing. The case came to the FCC's attention after members of the amateur community complained that Marcantonio (a Novice who is not authorized to operate in the two-meter band) was interfering with amateur radio communications by transmitting unidentified, disruptive signals on two-meters. The FCC traced the signal to the Marcantonio home on July 27, 1990. The investigators discussed the situation with a family member who then shut the transmitter off. The transmissions resumed that evening and continued the next day. It was then that Marcantonio made the threat.

K1MAN REBUTTAL TO W5YI INTERVIEW WITH KV4FZ

Glenn Baxter, K1MAN, Belgrade Lakes, Maine, filed a second affidavit with the FCC on August 17, 1990 charging several amateurs with additional interference to his §97.401(b) emergency communications. Both affidavits are available on the IARN telephone BBS by calling 207-495-2490 and downloading the BARF file.

K1MAN says, thus far, the FCC has shown no interest to move against ***Herb Schoenbohm, KV4FZ*** and others for interference to §97.401(b) emergency communications which does not require an FCC declaration of emergency because it is outside of FCC jurisdiction. This rule provides for essential communications when normal means are unavailable due to natural disasters in areas not regulated by the FCC. ITU regulation 640 (Geneva 1979) permits most HF bands and 2 meters to be used for international emergency traffic when necessary.

Baxter charges the *Better Amateur Radio Federation* (BARF), which he calls a radio terrorist group, with interference to emergency communications which is a felony and carries up to 5 years in prison and a $15,000 fine. He believes that the FCC is protecting KV4FZ and says "...they have been doing so for years. This would constitute conspiracy to obstruct justice on the part of FCC officials which is in itself is another felony reminiscent of the Watergate era. Watergate crimes were exposed and dealt with by the fourth arm of our United States government which is the free press." K1MAN says his amateur broadcasts are an important active part of the free press.

We carried an interview with Herb Schoenbohm, KV4FZ in our last issue. Glenn Baxter, K1MAN, objected strongly to our conduct of the interview. He wanted a clarification:

(1.) We said that Baxter threatened to take Schoenbohm to court if the FCC did not act on his charges against KV4FZ for interference to IARN §97.401(b) emergency broadcasts. This was incorrect. It is the FCC that Baxter will take to court if they don't act against Schoenbohm. Also, the interference was to IARN emergency two-way communications, and not broadcasts as we incorrectly reported.

(2.) Baxter objected to Schoenbohm's statement that the interference incident occurred "Three weeks after the so-called Iranian disaster." The communications took place on June 27, 1990, only six days after the June 21, 1990 earthquake.

(3.) Baxter objected because we didn't challenge Schoenbohm's statement that he (Baxter) was "Using the word emergency as a hoax to try and clear the frequency," when his first affidavit tells a quite different story. The affidavit which Baxter distributed to the media claims he activated the IARN network on June 21 to handle emergency and priority traffic associated with the earthquake in Iran which is authorized by §97.401(a) and (b). Approximately 100,000 people were seriously injured in the emergency zone.

(4.) On June 27, 1990, Baxter says he was advised by his IARN net control station of interference by U.S. amateurs. Baxter said he tuned to 14.275 Mhz. and requested the interfering stations to move frequency. "Repeatedly they refused." Baxter notified the Washington DC FCC watch officer and also asked the FCC monitoring station in Belfast, Maine, to assist. He was informed that the matter would be decided by Mr. Richard Smith, FCC Field Operations Bureau Chief. After speaking with Mr. Smith, Baxter later withdrew the request to institute a communications emergency when the interference stopped. "We both agreed that the request for FCC emergency declaration would cause more problems that it would ever solve and Mr. Smith agreed with the wisdom of my decision to withdraw the request." On June 27th the interference to IARN resumed and Baxter again requested assistance from the FCC a second time. This also was withdrawn once the interference stopped.

(5.) Baxter said that he disagrees with Schoenbohm's allegations that there are any significant illegal activities on the air by the various service nets. This is supported by Official Observer summaries, lack of evidence by BARF protagonists, and lack of FCC *Notices of Violation* in the public record.

W5YI asked about the *Notice of Violation* received by K1MAN on August 10, 1990 regarding an alleged phone patch between the United States and the Soviet Union. Baxter replied: "Case in point. The FCC monitors 14.275 MHz. all the time and jumped on what they perceived to be a K1MAN to UB5WE phone patch on August 6, 1990 and issued a *Notice of Violation.* However, no action was taken by the FCC regarding interference to §97.401(b) emergency communications on 14.275 MHz. on June 27, 1990. The FCC is obviously protecting KV4FZ for criminal interference and going after K1MAN on a far less serious charge. Certain FCC officials are playing with criminal obstruction of justice here and letting themselves cross over that thin line between politics and becoming criminals themselves as we saw in the Watergate era."